## ABSTRACT

A magnetic resonance imaging system in which measurement data (k space data) of arterial phase is extracted easily (and instantaneously) after imaging a plurality of time phases including the arterial phase and its image can be displayed in dynamic MRA measurement employing a contrast medium. Dynamic measurement is thereby carried out using a means for extracting the time phase evaluation values (e.g. the origin data in k space) in respective time phases and then automatically extracting a data set including a time phase where the time phase evaluation value reaches a specified threshold value.